ANNUAL REPORT

OF THE

TRUSTEES

OF

ATHENS LUNATIC ASYLUM,

TO THE

GOVERNOR OF THE STATE OF OHIO,

FOR THE YEAR ENDING NOV. 15, 1872.

COLUMBUS:
NEVINS & MYERS, STATE PRINTERS.
1873.

BOARD OF TRUSTEES.

W. E. DAVIS, PRESIDENT.....Cincinnati.

E. H. MOORE.....Athens.

H. S. BUNDY.....Hamden, Jackson County.

REPORT OF BOARD OF TRUSTEES.

ATHENS, OHIO, November 15, 1872.

To His Excellency, the Governor of Ohio:

The undersigned, Trustees in behalf of the State of Ohio for the erection of a new Lunatic Asylum at Athens, Ohio, have the honor to submit herewith their report for the year ending this date.

Since our last annual report the work in the various departments of construction has progressed satisfactorily, and we take pleasure in referring to the fact that although work under many of the contracts has been completed, and final settlements have been made with the contractors, there has not been in a single instance the allowance of any remuneration for extras, as is so often the case in the construction of public buildings.

During the year just ended, in addition to the progress on parts previously put under contract, contracts have been entered into with responsible parties, in accordance with the terms of the law regulating our action, for the erection of the connecting building, the boiler house and the ventilating towers provided in the plans, and for the furnishing of necessary steam heating apparatus and cisterns—copies of which contracts, duly approved by the Attorney General, have been deposited in the office of the Auditor of State. The provision of means for lighting the building still engages the attention of the Trustees, and a decision on that subject will be reached, and suitable works erected as soon as needed.

The plans furnished by our competent Architect, Mr. Levi T. Scofield, have been adhered to, and Mr. John M. Davis, the Assistant Superintendent, has contributed, by his energy and faithfulness, largely to the forwarding of the work and the satisfactory manner in which we are able to report that the work has been done.

In June last the Trustees were convinced that the highest considerations of the public good, and the desirability of thoroughly adapting the building to the practical uses for which it is intended, would warrant them in securing the services of some one thoroughly conversant with the needs and demands of such institutions, of whose advice and assistance they might have the benefit as the building drew near completion. With this view, we secured the services of Dr. Richard Gundry, whose

long term of faithful and successful service in the Southern Asylum, at Dayton, renders him thoroughly competent to afford the needed advice and assistance. We take pleasure in referring to the very able and exhaustive report upon the condition of this building, prepared by Dr. Gundry, and submitted herewith. In it he has, at our request, embodied a complete description of the building externally and internally, which description, we think, the tax payers of this State will peruse with pleasure, as showing the method in which a portion of their funds have been expended.

Referring to Dr. Gundry's report, we have to say that we ask the especial consideration by the Legislature of the suggestions relative to providing a reservoir for the storage of an ample supply of water for the Institution sufficient to secure it against contingency of drouth or accident. To complete the building of such a steam pump and reservoir as are suggested, would, it is estimated, cost $10,000, of which amount we ask an early appropriation, that the work may be promptly done.

With regard to the suggested plans for rendering the attics fire proof, we have to say that we recommend their adoption, and think the Legislature, in view of the recent losses to the State by the burning of Asylums, will need no arguments to convince them of the desirability, indeed of the imperative necessity, that the proposed work should be done.

To build the wing extensions described in Dr. Gundry's report, would require an appropriation of $100,000. We think the building of these additions every way desirable, but as the President of our Board is extremely desirous to be relieved from further responsibility after the delivery of the present building to the Trustees charged with the management of the Institution, we respectfully suggest that the erection of these additions may properly be devolved upon the managing Trustees after they shall have come into control.

We also submit herewith a complete financial exhibit of the affairs of the Institution, showing (1) the amount of the various appropriations by the Legislature; (2) the amounts allowed the various contractors on estimates for work on the main building, on the extensions and other branches of work; (3) the amounts expended for miscellaneous expenses, such as architecture, superintendence, &c.; and (4) the amount of percentages still retained upon uncompleted contracts.

To finish the work now under contract and in progress to render the Asylum ready for occupancy and to pay retained percentages on contracts, will require the additional sum of $150,000, an appropriation of which sum we ask. To furnish the building will require, as we estimate, $65,000, an early appropriation of which amount is very desirable, so that

the work of making the needed furniture can be immediately put into competent hands and completed by the time the building is ready to receive it.

By the aid of these appropriations, and by dint of our personal attention and the diligent assistance of the gentlemen above referred to, we are confident that we shall be able, on or about the 4th of July, 1873, to open, for occupation of the unfortunate sufferers for whom it is intended, an Asylum second to none in this country in its appointments, conveniences, healthfulness and beauty of location.

All of which is very respectfully submitted.

WM. E. DAVIS,
H. S. BUNDY,
E. H. MOORE,
Trustees.

FINANCIAL STATEMENT

From Books of the Athens Lunatic Asylum, showing Appropriations, Estimates approved, Expenditures and retained percentages, up to Nov. 15, 1872.

APPROPRIATIONS.

FOR BUILDING.

April 16, 1867	$150,000
May 5, 1869	100,000
April 16, 1870	50,000
May 2, 1871	75,000
February 10, 1872	25,000
April 27, 1872	192,000
Total	$592,000

FOR SEWERS, DRAINS, ETC.

May 2, 1871		$15,000

FOR GRADING, SEWERAGE, ETC.

May 5, 1871	$3,000	
February 10, 1872	3,000	
		$6,000

FOR CONTINGENCIES, ETC.

April 27, 1872	$8,000
Total appropriations	$621,000

Total estimates approved for various branches of work to end of the last fiscal year, November 15, 1872:

UNDER ORIGINAL CONTRACTS FOR MAIN BUILDING.

Excavations on grounds	$3,242 95
Miscellaneous materials	1,273 78
Excavations front building	2,401 49
Stone work	39,398 90
Brick making	60,805 60
Brick laying	55,416 70
Joist and roof timbers	14,163 03
Flooring and roof boards	9,487 61
Yellow pine flooring	3,920 00
Carpenter and joiner work	28,792 94
Wrought iron work	16,671 80
Cast iron work	12,347 25
Galvanized iron work	38,235 63
Free stone ashler	27,152 99
" steps, flagging, etc	10,494 43

Cut stone work	$26,524 19
Painting and glazing	5,205 43
Centers and camber strips	600 00
Flooring, joist, etc	1,540 76
Plumbing	8,962 99
Gas fitting	4,066 95
Plastering	16,702 95
Total	$387,408 37

ESTIMATES APPROVED UNDER CONTRACTS FOR EXTENSIONS.

Excavation and masonry	$14,737 10
Painting and glazing	1,237 81
Centers and camber strips	300 00
Cut stone work	11,297 81
Brick making	26,250 00
Brick laying	24,395 00
Carpenter and joiner work	6,646 75
Cast iron work	4,738 40
Wrought iron work	25,468 18
Galvanized iron work	3,731 00
Total	$118,802 05

UNDER CONTRACTS FOR OTHER PARTS OF THE WORK.

Sewers, drain pipes, etc	$15,100 32
Grading, fencing, etc	9,245 31
Galvanized iron work on towers	300 00
Towers	6,200 00
Connecting building	10,390 35
Cisterns	4,110 00
Foundations outer steps	791 50
Heating apparatus	7,200 00
Boiler house	4,500 00
	$57,837 48

MISCELLANEOUS EXPENDITURES.

Architecture and superintendence	$22,420 66
Contingent expenses	3,370 13
Protection of building, (watchmen)	826 14
Total	$26,616 93

RESUME.

Estimates approved main building	$387,408 37
" extensions	118,802 05
" other work	57,837 48
Miscellaneous expenditures	26,616 93
	$590,664 83
Percentages retained on uncompleted contracts until making of final estimates	$45,899 19

REPORT OF SUPERINTENDENT.

To the Board of Trustees of the Athens Lunatic Asylum:

In accordance with your request, I have the honor to submit for your consideration this report of the present condition and wants of the Institution, now in process of erection, under your charge.

By your appointment, I entered upon the duty of superintending the construction of the building, during the month of June last. The administration building was then but little advanced; the walls were up to the second story, two sections of the wings on each side, and the rear building for laundry purposes were built and covered. The walls of the new wings or extensions were in progress. Now the brick work of administration building and of extension wings (except the arches of floors) is done. The building between the administration and rear buildings, containing a large airduct corridor and eight rooms for domestics, is constructed. The whole of the administration and rear buildings and twelve wards, are plastered. A boiler house is constructed at a distance from the other buildings. A large part of the plumbing is done. The roofing of all the buildings originally contracted for is finished. On the extensions the iron frame work of the roof is on. One section of the slating is finished, and the other is in progress. The contractors for the steam heating apparatus have also commenced their operations, and will before long place their boilers in position. Throughout the building (except in the extension, where the floors are to rest upon brick arches) the first floors are being laid and covered with plaster, over which, when thoroughly dry, the upper floors will be laid. Nearly all the outside steps and platforms have been put down. Several of the ventilating towers are finished. Six small receiving cisterns and two larger cisterns for storing the rain water from the roof, are built. The pipes leading to them are not yet put down. The gas pipes are laid throughout the original building, and a large amount of flagging done in the kitchen, laundry and corridors of basement.

When this location was selected for hospital purposes, it was supposed that the numerous springs on the grounds would supply sufficient water for the daily needs of the institution. They may be sufficient if collected into a common reservoir, but some of them are inconveniently situated

for the purpose, and three or four successive seasons of extreme drought have more or less affected all of them. Judging from what has occurred within my own knowledge elsewhere, I should be very reluctant to place our whole reliance for water supplies upon these springs. The daily requirement will average more than thirty thousand gallons. An emergency may arise which shall call for twice that amount. Fortunately we may provide for this contingency, if we are enabled to carry out the following plan: There is upon the asylum grounds a hill, the top of which is about fourteen feet above the highest part of the roof of the building. Here we could construct a reservoir of the proper size, to be supplied from the Hockhocking river close by. A well to receive and filter the river water in the bottom land at the foot of the hill, and a steam pump, would keep the reservoir constantly full. The distance of the proposed reservoir is about fifteen hundred feet from the building. Pipes should of course be laid around the building, with proper fire-plugs, and also through the center of the building to the roof, with attachments for hose on every floor.

The third sections of each wing, authorized to be built after the rest of the building had been contracted for and commenced, were designed to be fire-proof. The floors are supported upon brick arches built upon iron joists, and the roof is entirely of iron and slate, the cornice of galvanized iron. The original building is not, however, so thoroughly fire-proof. The roof upon two sections on each side, is of slate, upon pine sheathing and rafters, resting upon the brick walls of the corridors. On the administration building the roof is of slate and copper, upon similar sheathing and rafters, supported by truss work of heavy timber. The floors throughout the original part of the building are supported upon pine joists, and are double, with a layer of mortar one inch and a half thick between. The attic floors, however, only consist of pine boards, supported by the ceiling joists of the upper story. It would seem that nearly all large fires occur in the roof or attics, which falling while burning, engenders so much heat that all means of stopping its progress are useless; or else from flues, shafts for dumb waiters, elevators, stairways, &c., by which flame is conducted from one story to another, and finally to the attics, whence the course of destruction becomes rapid and general. In our building the attics furnish the real cause of danger. The rest of the edifice is so guarded by brick walls and other means, that in my opinion, the danger of fire originating and spreading is very slight, but if it reaches or originates in the attics, I fear that division walls, &c., are practically useless. To lessen this evil, it has been suggested to coat over the attic floors with a heavy layer of mortar, or to cover them with

bricks laid in mortar or cement. The only objection to these methods seems to be that they both depend upon the joists below them. A better, but more expensive plan would, in my opinion, be to build another floor, over the attic floor, of iron arches, resting upon iron joists, attached to the brick walls, which are amply strong for this purpose. These arches, covered with concrete, would form a perfect fire-proof and independent floor, and protect the house below from any burning material above. Should this be carried into effect, although it might be wrong to style the building fire-proof—practically the risk of fire would be but little more than if it were. At any rate, with the attics protected in this way, and an abundant supply of water, the beginning of a fire could be successfully met, and lamentable experience has shown that only at the commencement is resistance to fire usually crowned with success; and that when from failure to arrest its progress it has reached any great headway in the accumulation of burnt material, the so-called fire-proof buildings have received more or less injury.

Estimating the future progress of the work from the operations of the past five months, I believe we shall so far complete the structure as to be able to admit patients during the month of July, 1873; and in order to accomplish so desirable an end I trust you will urge upon the Legislature the early appropriation of funds to finish the building. In my opinion it will require $150,000 for this purpose. Of this amount about one-third will be required to pay the percentage retained upon the contracts for work already done.

In addition to this amount it will take $65,000 to furnish the building for occupation. This sum should be appropriated at as early a period of the session as possible, so that the work connected with it might proceed at the same time with the remaining work of the building. If deferred to the end of the session, a corresponding delay must take place in the time of opening the house to patients. Much of the furniture should be manufactured specially for the purpose; and all of the mattresses, bedding and similar articles, I design, with your concurrence, to be made in the house.

Of one matter I wish to remind you. The plans for this building originally included a return wing in the third section of each side, designed for strong rooms for excited patients. These have not been built, nor is the omission altogether to be regretted. I do not think that strong rooms attached to a ward is the best plan for the treatment of excited patients, but I would suggest that a small section of wards for each sex should be added at some time, so designed that the excited class of patients could be specially cared for. The wards should be for a smaller number than those for the quieter patients. The rooms should be

made as cheerful as for any other patients, but so constructed as to resist the violence and mischief of the most excited. The windows could be guarded by shutters sliding into the walls, and a verandah should be added to the end of the corridor so as to give this class, at all times when desired, fresh air, when they could not go out into the airing courts or other grounds. By this means the other wards would be relieved of their most dangerous elements, as well as an additional number of patients be provided for. Should this not be sanctioned, some of the rooms of the third section will have to be specially fitted up for this class of patients, in a manner not provided for in any existing contract. If this suggestion should be adopted, the work could be done independently of the other work now in progress, under the same supervision. The cost of this extension, made fire-proof, would be about $100,000.

For the information of those to whom this report may come, not familiar with the Institution, I venture to add a brief sketch of the building. It is situated upon a high plateau of land about a mile distant from the town of Athens, the river Hockhocking winding in its circuitous course through the valley between the asylum and the town. The farm belonging to it comprises about one hundred and fifty acres, broken in its surface, somewhat wooded, and admirably adapted to the purposes of the landscape gardener, to develop the pleasure-grounds and gardens, drives and walks, of such interest to all, but so necessary for the comfort of those who may be compelled to spend months or years, or even pass away the rest of their lives within its boundaries. The plan for laying out the grounds for these purposes, made by Mr. H. Haerlin, of Cincinnati, and adopted by you, is admirably adapted to develop the great natural beauties of the place and to add those of cultivated art, and will, I trust, be carried out in coming years to completion. At present the work has necessarily been confined to grading in front of the building and constructing the principal approach, which, from the steepness of the hill on which the asylum stands, has involved great labor and expense. Some idea of the general character of the contemplated improvement can be gained from some parts of the work already done. The building itself is of brick, trimmed with Buena Vista freestone, and is 853 feet in length in a straight line. It is divided into an Administration building, with two wings for patients at the sides, and a series of buildings extending from it in the rear, for domestic and other purposes.

The *Administration Building* is four stories in height, and comprises a front and rear division. The first includes, on the first floor, an entrance hall sixteen feet wide and fifty-five long, on each side of which are the offices of superintendent, assistant physicians and steward, and general reception room for visitors, and the large stairways to the stories above.

The second story of this division contains the apartments of the medical superintendent. The third and fourth stories comprise similar rooms for the other officers of the institution. In the rear division of the administration building, a central hall twelve feet wide, leads from the front to the rear, on either side of which are the passages to the patients' wards. In the basement of this division are placed the kitchens, sculleries, and other domestic rooms for the general household, and beneath these are cellars. On the first floor are the dining-rooms and kitchen of the officers, reception rooms for friends of patients, and general store-room. On the second floor the central hall leads to the amusement hall, 66 feet by 42 feet, and twenty-eight feet in height, occupying both second and third stories. Above this room, in the fourth story, is a room of similar size, sixteen feet high, designed for religious services. Besides these rooms, there are on each of these stories two rooms for reading, sewing and other purposes, and on every floor bath-rooms. A stairway leads from the basement to the second story in this division. On either side of the administration building in the wings are the wards for patients. Each wing is of three stories in height, except at the end, where a fourth story is placed over part of the third section. Each wing is divided into three sections, connected together, but receding in echelon. Thus ten wards are made on each side, providing for the classification to that extent of each sex. Each ward contains a central corridor, fifteen feet wide, with the rooms opening into it on each side. In the center of the front part of each ward is the parlor, a handsome room, 24 by 16 feet, with bay window. A dining-room and associate dormitories, and bath-rooms, lavatory and water-closets are attached to every ward. An iron stairway leads in every section from basement to attic, and communicates with each floor therein. Thus it will be seen that on every floor there are six wards for patients. The single bed-rooms are about 9 feet by 11 feet, and vary in height from twelve to fifteen feet. The associate dormitories vary in size from ten feet by twenty feet, to twenty by twenty feet.

Reckoning each single bed-room to be occupied by one patient, and the dormitories by the numbers they are designed to accommodate without improper crowding, there will be in these wards ample room for 572 patients, as follows:

In 282 single rooms	282 persons.
In 64 associated dormitories	290 "
Total	572 persons.

Under the wings is a basement connecting with the kitchens and basement of the administration building, in which will be the railroad for the conveyance of food to the dumb-waiters of the dining-rooms in each ward,

and the chambers for the steam coils and pipes connecting them to heat the wards above.

In the rear of the administration building is a series of buildings, comprising connecting building, laundry building and boiler-house. The connecting building contains a long corridor continuous with the central hall of administration building, having on one side eight rooms for domestics or other purposes. In the basement is a similar corridor, and also passage for steam pipes, &c. Below this is the air duct for supplying air to steam coils of main building. The laundry building has two stories and a basement. In the basement will be the washing, drying and ironing rooms, also the engine-rooms and bakery. The back part of this basement was intended for the boilers, but these now occupy a separate building. In the first and second stories, over this, are rooms designed for workshops. The remainder of these stories will be devoted to rooms for domestics. In the centre of this building is situated the water tower, 68 feet high, containing four large iron tanks capable of holding 8,000 gallons of water. These are supported upon iron beams. Still further in the rear is the boiler house, built especially for the six boilers for heating the building. The reasons for removing them from the quarters designed for them are obvious. In case of explosion, or other accident, the lives of so many would be exposed to much risk which it is not right to induce them to incur. Moreover, the comfort of the employes would be sadly interfered with from the great heat of the boilers, immediately beneath them, in the same building.

The whole building will be heated by steam, generated by six boilers, and conveyed to steam coils inclosed in chambers immediately attached to the flue of the room intended to be heated. Under the wards these chambers are placed in the rooms and communicate with the external air, and there is a distinct chamber to each flue. In the wards, the dining-rooms, parlors and attendants' rooms will also be supplied with direct radiation, so that both direct and indirect radiation will be relied upon. In the main building, the chambers containing the steam coils derive their air from an air shaft into which pure air will pass from without. This part of the building is also largely supplied with fire-places in the various rooms, the oldest and best mode of heating and ventilation yet discovered. In the rooms for domestics direct radiation will be used. Wherever the room is to be warmed by indirect radiation, the heated air is brought in near the ceiling and the ventilating flues, open near the floor and also near the ceilings, except where they would be too close to the hot air openings. In this way, it is believed, that the atmosphere will be made more equable and less interrupted by the opening and shutting of doors

and windows, while the annoyance of stuffing the hot air flues with torn papers and shreds, so constantly observed in the wards of the insane, is entirely obviated. The ventilating flues, passing from the upper and lower portions of the rooms to the attics, open into the corridors there, whence the foul air is drawn to the ventilating towers in the centre of each section. These towers will contain direct radiators for this purpose. All the water closets are ventilated downwards by air ducts communicating directly from the soil pipe to the smoke stack.

To sum up: the whole building contains five hundred and forty-four rooms, (exclusive of closets) every room having one or more windows opening to the external air. There are twenty-four rooms in the front administration building for offices and apartments of officers; eighteen rooms in rear administration building for general dining-rooms, patients' reception parlors; amusement hall and chapel; six bath rooms and closets; five rooms in the kitchen department. In the rear buildings are twenty-six rooms for employes, thirteen for workshops, bakery and laundry purposes, and a boiler house. In the wings there are eighteen corridors, fifteen feet wide and from 140 feet to 175 feet long; two hundred and eighty-two single bedrooms for patients, and sixty-four associated dormitories; eighteen rooms for attendants or nurses; eighteen dining-rooms; eighteen parlors, and fifty-four rooms for bath rooms, lavatories and water closets—in all four hundred and fifty rooms in the wings.

The building is 853 feet long in a direct line, with an average width of sixty feet. Following the outer walls in their recesses and projections the distance is 4,072 feet, or somewhat more than three-quarters of a mile. Eighteen millions and a half of bricks are in the building.

Such are some of the principal features of the building, now approaching completion, to which your anxious and assiduous efforts have been so freely given. I venture upon no comparison between its size or plan, and others devoted to the same noble purpose in this and other countries. Large as it really is, it is eclipsed by several in extent and capacity. In New York, the asylum at Utica, with its 800 patients; the New York city asylum, with its 1,400 patients; in France, La Salpetriere, with its 1,400 patients; Manville, in the Department Meurthe, with its 1,200 patients; in England, Colney Hatch or Hanwell, each having more than 1,000 inmates, and Caterham with its 1,600 patients, and several others of similar capacity, would forbid comparison with our capacity of 570 patients! And, indeed, while the enormous size of such institutions may be defended on the ground of economy in administration, the necessities of the case and the fact that four-fifths of the inmates are chronic and incurable cases, it must be always borne in mind that the true interests of the insane would

be better served by smaller institutions and more of them. Challenging then, in comparison in point of size with these huge caravansaries, we need not fear to examine with any of them the amount of air, proportion of space and light provided for each, satisfied, as I am, that in these particulars we shall equal if not excel them.

In conclusion, I would add that on taking charge of the building, I carefully went over every part of it with a view to the suggestion of such changes as might be desirable for the convenience of administration or the comfort of patients who might come here. In this examination, I could not fail to be impressed with the very thorough and substantial manner in which the work has been done and the excellence of the materials supplied. Very few and these but minor alterations in the details of arrangement appeared to be necessary, and I can sincerely congratulate you on the excellence of the plan you adopted and the manner in which it has been carried out. I repeat that few if any institutions, within my knowledge, will surpass this in the essential and fundamental requirements of all such buildings—the proportion of space, light and air to each patient. The exterior of the building is certainly pleasing to the eye, and conforms to the benevolent purpose to which it is devoted. No gloomy aspect will terrify the patient as he approaches and enters this building, and whoever considers the importance of the first impressions made upon a bewildered and fearful sufferer, as he enters what will prove to him a prison or a home, will not think these are slight matters. Your architect, Mr. Scofield, deserves the highest credit for the results of his professional skill in planing and arranging this great structure, so as to combine the essential features of an hospital with the strength required for the peculiar class of invalids to be treated, without throwing over them the gloomy and forbidding aspects of a prison. What he so ably and tastefully designed has generally been admirably carried out by the contractors who have done the work.

I cannot bring this report to a close without recording my obligation to Mr. John M. Davies, who has so efficiently filled the position of Assistant Superintendent of the building from its commencement. His valuable assistance has been given to me cheerfully and fully at all times. Many a man would have felt, that a stranger coming at the close of a work, which he had so laboriously carried forward, was an intruder attempting to carry off his well earned reputation, and might have acted accordingly. On the contrary, nobody could have co-operated more cordially and faithfully than he has done since I came here. To his fidelity to this work —his inflexible honesty and unsparing diligence throughout his whole

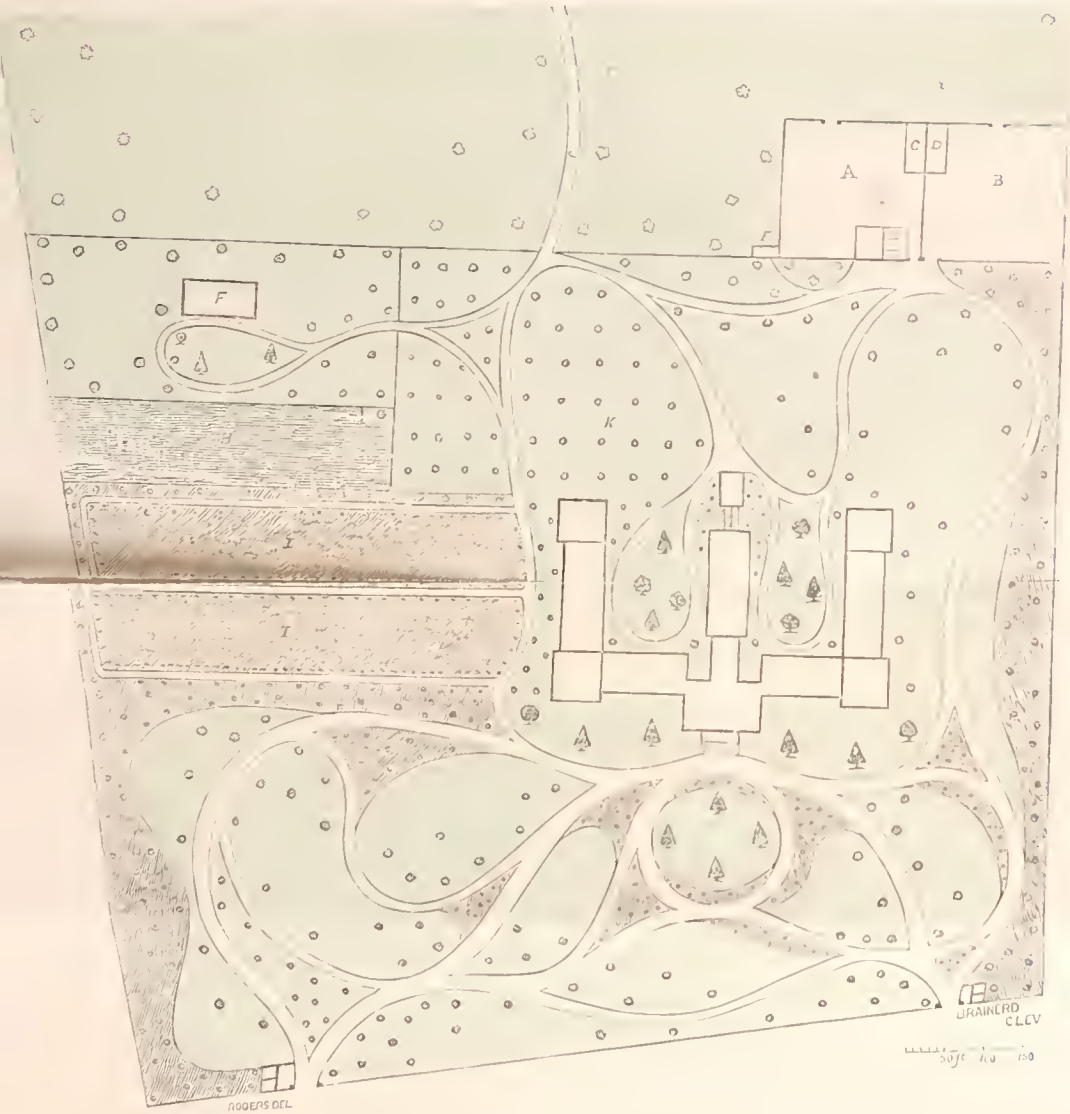
connection with the building, the State is indebted, in a large degree, for the excellent manner in which the building has been constructed.

For your preference which called me to my present position, and the generous confidence and support you have so constantly extended to me in the performance of its duties, I can only return my heartfelt thanks.

Respectfully submitted,

RICHARD GUNDRY.

OHIO LUNATIC ASYLUM.



PLAN OF PROPOSED IMPROVEMENTS IN GROUNDS.

A, Barn and Yard. B, Wood-yard. C, Cow-house. D, Wood-house. E, Poultry-yard. F, Infirmary. G, Green-house. H, Botanic Garden. I, I, Vegetable Garden. J, Road to Cemetery. K, Orchard.